This book analyses the development of the TLC market all over the world focusing on Italy, whose situation is widely described with statistical data and political and economic comments. It consists of three sections: the long period of the monopoly, from the end of the Nineteenth century to 1984; the period of transition from the monopoly to competition (1984-1997); and the period of the competitive system (1998-2002). Topics follow a chronological order, but the events happening after the deregulation of the market in 1984 undergo closer examinations. At a global level, all relevant facts regarding the main countries are reported, and peculiar attention is paid to the market of the United States.

**Origin and development of TLC (XIX century-1984)**

The first section includes an outline of the historical origin and development of TLC and short notes about studies carried out in this sector. This part deals with the beginning of the most important branches of TLC: from “electric communications” to the more recent “TLC economy”.

This part of the book includes the different phases of ATT monopoly in the USA (1876-1986) and particularly relevant facts of the history of TLC economy and regulation, such as the different institutional systems of the main European and non-European countries until the coming of liberalisation. The Italian TLC sector is analysed since it appeared in 1881 to the foundation of SIP - now Telecom Italia - in 1964. We can divide the history of this first period in three main phases. The first phase starts with the appearance of telephony in Italy in 1881, passes through the debate about ruling the telephone sector to end to the slow development of telephony until 1925, that year, the Italian market was virtually divided into six “phone areas”: five of them were private and dedicated to national TLC, while the remaining one, the state-owned ASST worked in the field of international telecommunications.
The second phase consists of the evolution of the phone services in Italy from 1925 to the end of the Second World War in 1945. It is characterised by the foundation of STET – a partially state-owned finance company which played a main role in the history of Italian TLC— and by the first decades when the five companies holding the concessions to operate in the five related “phone areas” started their activities.

The third phase concerns the development of Italian telephony from 1946 to 1964: the reconstruction of the national net in the after war period and the interesting and hot debate about resettling the sector. The organisation of the telephony sector, defined in those years, basically remained the same until the European Union decided for the liberalisation in 1998. Main themes of the debate were a possible nationalisation of the sector; the need of one and only company in charge of telephony; and the discussion about collaboration with ITT.

From monopoly to competition (1984-1997)

The second part of the book reports some facts concerning TLC in the world during the short transition from a condition of monopoly to competition between 1984 and 1997. Concerning the Italian scenario, great attention is paid to the three decades where SIP operated (1964-1994) and to STET’s hegemony on national TLC and most of Italian electronics. For an easier understanding, this part is divided into four periods: the big development (1964-1973); the years of the crisis (1974-1980); the beginning of the growth (1981-1987); and the period of the European Plan and the foundation of Telecom Italia (1988-1994). In this section, all data and the main developments of TLC occurred during the thirty-year activity of SIP are explained in detail. A wide section is dedicated to the political debate about the resettling of the sector during those years. Many proposals of the period were implemented only after decades. This situation caused several problems not only to the sector but also to users: just think about the four management levels of SIP, the lack of regulation and the irrational division among totally and partially state-owned firms: the italian way in the world of TLC. In that period, STET played a key role in the sector. It was a valid finance company but it was also unable to manage the whole of the national sectors of electronics and TLC. This part of the book also highlights political ties between the management staff of STET – SIP group and the majority party of the moment the Christian Democratic Party (Democrazia Cristiana). Nevertheless, the importance of SIP is well explained as well as its ranking among the most profitable companies. The only exception being represented by its serious crisis due to the unusual situation of Italian TLC between 1978 and 1979.

Following SIP history, the section explains the role of Italcable in relation with international TLC during that long period comprised between its foundation (1921) and the merger between Italcable and Telecom Italia. Before being taken
over by STET, Italcable was a private company ranking among the giants of international TLC, which operated in an open market actually controlled by a restricted group of big operators. Like other international operators, Italcable had always yielded high profits to its shareholders: both as a private and a state-owned company.

This second part of the book also describes the important phase of development of TLC at a global level. Basically, the radical change of the TLC industry depended on technological innovation and a changing of its regulations. EU started developing its own policy regarding TLC industry in those years. It can be divided into four phases: the first three phases regarding the preparation of regulations and the approvals of directives lasted from 1984 to 1997; while the fourth phase of implementation and management of the competitive market took place between 1998 and 2002.

The main fact that led to a global liberalisation of the industry are also given in detail: the “Telecom Act of 1996” in the United States, and the WTO agreement in 1997. The chapter illustrates the most important bodies of standardisation – UIT, CEPT, CENELEC and IEEE -, their structures and the basics of their activities.

This second part closes with a paragraph dedicated to the standardisation of the TLC industry. The different steps of the standardisation process are briefly described. The main features of regulation and the most relevant contents are also described as well as great attention is given to the Authorities operating in the different areas of the globe and to the existing typologies.

The competitive market (1998-2002)

The third part of the book refers to the early beginning of full liberalisation in the TLC world from 1998 to 2002. A wide section of it concerns Italian TLC, even if a full description of the global market, notably of the USA market, is given.

The first topic discussed in this part is the process of agreements, alliances and mergers that took place when the industry was flourishing. It is reported the main agreements and alliances that totally restructured the TLC industry and the whole of the ICT macro-sector. The main actors of that phenomenon were the big USA-based companies, some of which are real case histories: just think about the astonishing growth of WorldCom and its sudden and unexpected crisis.

Talking about technology, the invention and the fast spread of mobile communications represented a turning point in the history of TLC. The appearance of GSM, the foundation of companies such as Vodafone and NTT Docomo, as well as all troubles concerning the UMTS system. These topics are analysed according to a wide range of pieces of information and data. Particular attention is dedicated to TIM. Its fast development in its early days and its successful and clever marketing policy has become an example even at an international level.
The Internet phenomenon - or the Internet “tornado” as it was defined in a study by FCC – has undoubtedly shaken traditional TLC. Not only does this book report the beginnings and early developments of the Internet, but it also dwells on the phenomenon of the “Internet telephony” and the revolution that is shaking TLC technology: all communications will use the Internet within a short time.

The industry scenario in the last ten years is completed by a paragraph dedicated to multimedia convergence. When TLC industry was flourishing, convergence seemed easy to achieve, notably between TLC and CATV. Later, it was clear that it was more realistic to speak of a slow and gradual process, and that is more realistic to speak of partial convergence, such as the one between mobile telephony and the Internet.

An important chapter is dedicated to Italian TLC after liberalization: the privatization of Telecom Italia; the foundation and development of Wind and Omnitel; and Telecom Italia after privatization. Between 1994 - when a unique operator of Italian TLC was established – and 2001, Telecom Italia experienced many innovations and changes. In those years, it was sold by the State to private investors in different phases. The company changed seven chief executives; experienced radical changes of strategy and sudden organizational transformations; power struggles and judiciary troubles that would destroy any other company. The politicians involved in the management of Telecom Italia made an incredible chain of mistakes and there is no doubt that they act neither for the common good of the State, nor for society. In no other country has a national operator had such a traumatic past. The vicissitudes experienced by Telecom Italia resulted in the fact that in early 2003 you can find no other country in the world, but Italy, where one and only private subject owns a big TLC company like Telecom Italia.

Actually, Wind and Omnitel-Vodafone are the only real competitors of the Telecom Italia group, even if the Italian scenario shows other smart competitors such as Albacom, e-Bisc, and Tiscali. Wind is present both in traditional and mobile telephony and is also an Internet provider. After the buy-out of Infostrada by Wind, it is right to say that in Italy there is a situation of duopoly which sees the Telecom Italia group on one side and Wind – Infostrada on the other. In the market of mobile telephony, Omnitel-Vodafone helds a fair share of the market ranking second after TIM, and it is expanding steadily.

The first main fact characterizing Telecom Italia’s history dates 20th February 1999, when Olivetti’s board of directors announced a takeover bid for Telecom Italia. A very significant change is represented by the take over of the company in July 2001 by the President of Pirelli Group, Mr Marco Tronchetti Provera. In that period, Italian TLC experienced many important changes as well: the merger plan of Telecom Italia and Deutsche Telecom, which soon turned out to be a failure; the facts involving Seat-Pagine Gialle, facts that are still difficult to understand and to reconstruct; the scaling down of the policy of Telecom Italia at an international level.

In the period between 1998 and 1999, the TLC industry flourished at an inter-
national level and the same can be said about ICT in general: digital economic made its appearance; companies planned new strategies according to the new scenario; internationalization and globalization seemed unstoppable phenomena; the banking and financial sectors believed and counted a lot on TLC.

The TLC industry faced an extremely difficult situation at the beginning of 2000: the consumption of some products was near to saturation, others had difficulty in taking off; the offer was still higher than the demand and the convergence turned out to be a difficult and long-term one. The sector showed three critical elements at least: many operators are in debt because of some aggressive policies of acquisition and the excessive cost of infrastructures and licenses (GSM and UMTS in Europe, wide band in the USA); shortage of alternative access nets; and a clear difference between the strategic evaluation made by many operators and the commercial and technological evolution. Further in the book, it is analysed the reorganisation of US market in those years and the crash on the Stock Exchange of the main companies operating in the TLC industry after the big mergers. In that period, the regulations fixed in 1996 were being reconsidered.

Regarding Italian TLC during that crisis, in the years between 2000 and 2003 the debate was about two main issues: the race for UMTS and the unbundling in the local loop. Five years have passed since liberalisation, and in 2003 the Italian market of traditional telephony still has one incumbent actor, Telecom Italia, and only three licensed operators out of 118 – the total amount of licences is 232 – is in the position of obtaining relevant shares of the market. According to data gathered at the end of 2002, Telecom Italia’s share of the market is 76.8 %. Its new strategy under the management policy of Mr. Tronchetti Provera was based on three points: reducing debts, cutting costs, fighting competition. From the point of view of technology, Telecom Italia is adopting IP protocol according to its plan of cutting down technical costs by managing only one infrastructure.

In the last chapter of the book, we analyse the consequences of TLC crisis and we try to identify future scenarios. In a scenario of partial recovery there could be an increase on concentrations as well as a growing number of mergers and buyouts. Such a situation could lead to a change in business organisation and new investments on IP nets. Progressive development of UMTS and 3G technology are plausible together with a high selective situation for start ups and a new and heavy re-organisation of the US market and a standardisation of the European market.

If the sector is really facing a period of long-term structural changes – where the TLC industry has become “cyclic”, as many well-known experts say – then all ruling authorities and governments should think it over! After a long period of monopoly and a difficult start of the competitive market, perhaps the Italian TLC sector was not completely ready to operate in a liberalised market and that limiting regulation to the mere function of Antitrust was not enough.

The book comes with a complete analytic index that is useful for references and with a wide bibliography including a hundred of books and essays.